**Canadian Metals Inc.** 

CNSX : CME



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# **Canadian Metals Confirms the Use of Their Silica for Ferrosilicon**

**MONTRÉAL, QUÉBEC--(Marketwired - Nov. 27, 2013) -** Canadian Metals Inc. (the "Company") (CNSX:CME) is pleased to announce preliminary results of the characterization study including metallurgical tests prepared by Genivar on our Langis deposit.

## INTRODUCTION

Metallurgical test work was performed on three (3) drill core samples of silica quartz taken from the Langis deposit at the CTMP laboratory in Thetford Mines. These tests included:

- Chemical analysis of major oxides and trace elements by XRF;
- Thermal shock evaluation of lump silica;
- Physical characterization of silica sand at -600 +106 microns including grains shape.

## Highlights of the test work results are:

## ANALYSIS OF CORE SAMPLES

The average silica content is 98.55%, including loss on ignition (LOI) between 0.3% and 0.5%. For high temperature applications, the corrected grade, excluding LOI, indicates a silica grade in the order of 98.95%  $SiO_2$ , 0.14% Fe<sub>2</sub>O<sub>3</sub>, 0.48% Al<sub>2</sub>O<sub>3</sub> and 0.05% TiO<sub>2</sub>.

## THERMAL SHOCK RESISTANCE

This evaluation was based on the 'SKW' procedure, in which the sample is introduced into a furnace at 1000°C for at least 15 minutes. After cooling and light mechanical breakage, it is screened at 12.5 mm and the percentage retained is determined. Based on industry practice a result of more than 80% demonstrates the material has a high resistance to thermal shock. Our preliminary results on four samples to date indicate an average value of 93.8%.

## PHYSICAL CHARACTERIZATION OF SILICA SAND

By removing the -106 microns fines fraction a proportion of the impurities are eliminated. The residual sand is of higher purity. Preliminary analysis of a homogenized sample from the third drill core (PL-13-05) is in the order of 99.47% SiO<sub>2</sub>, 0.04% Fe<sub>2</sub>O<sub>3</sub>, 0.20% A1<sub>2</sub>O<sub>3</sub> and 0.03% TiO<sub>2</sub>.

Further tests were conducted to evaluate the effects of attrition and magnetic separation on the overall reduction of impurities. Results will be forthcoming.

#### **ROUNDNESS AND SPHERICITY**

A preliminary evaluation of a homogenized sample based on API RP 19C standards indicates the silica grains have a roundness and sphericity in the order of 0.6, which is the minimum requirement for hydraulic fracturing sand (frac sand). Further tests are required to properly determine if the material lies within the industry standards. This would include tests for apparent density, crush resistance and acid solubility.

#### CONCLUSION

Preliminary test work demonstrates the potential for high purity silica from the Langis deposit. The impurities contained in the core samples so far are about 1%, with a silica grade in the order of 98.55% and a loss on ignition of 0.36%. When corrected for loss on ignition, the silica grade averages 98.95%.

Initial thermal shock tests based on the 'SKW' procedure indicate that the lump silica has a high resistance to thermal shock.

When eliminating the -106 microns fines, the impurities can be reduced to approximately 0.54% which corresponds to a silica grade of approximately 99.47%. The results on other samples will be forthcoming.

Initial evaluations of the grains' shape indicate a roundness and sphericity that may be suitable for use as hydraulic fracturing sand. Further tests are required for detailed evaluation of roundness and sphericity, crush resistance and acid solubility.

"We are very pleased with these results, which confirm historical results as well as the utilisation of silica from the Langis deposit for the production of ferrosilicon. This demonstrates the potential, the quality and purity of our Langis deposit", declared Stéphane Leblanc, president and CEO of Canadian Metals.

The team, Canadian Metals are also continuing discussions with a number of potential users of silica sand. The Company is presently in discussion over long-term sales clauses and risk distribution among potential buyers.

Mireno Dhe Paganon, Metallurgical Engineer, acting as qualified person in accordance with national instrument 43-101 and Claire Hayek, Mineral Processing Director, have approved the technical information contained in this press release.

Canadian Metals is a mining exploration and development corporation based in Montréal, Québec. The Corporation is focused on acquiring, exploring, and developing mining properties. Its flagship project is the Massicotte property located in the Detour Gold Trend, in the province of Québec, Canada. Canadian Metals is also looking for new projects to complete its portfolio. For more information, please refer to the Corporation's website at www.canadianmetalsinc.com.

Neither the CNSX nor its Regulation Services Provider accepts responsibility for the adequacy or accuracy of this release.

# **CONTACT INFORMATION**

 Stephane Leblanc President and CEO (418) 717-2553 <u>sleblanc@canadianmetalsinc.com</u> <u>www.canadianmetalsinc.com</u>

Victor Cantore Vice President Business development (514) 449-8484 <u>vcantore@canadianmetalsinc.com</u> <u>www.canadianmetalsinc.com</u>